

REMARKS

By this Amendment claims 2-10 have been amended to improve their presentations and new claims 12 and 13 have been added to alternatively define the invention (note support in the specification at page 2, lines 9-11, and page 4, lines 3-5). Entry is requested.

The examiner has rejected claims 1-7, 9 and 11 under 35 U.S.C. 102(b) as being anticipated by Fukuda. This rejection is incorrect!

Fukuda discloses multiple emulsions, i.e., a dispersion having the form of water phase/oil phase/water phase. This is not the same as polyaphron dispersions containing complex internal phases as presently claimed. Emulsions and polyaphron dispersions are not the same. Although, they may be composed of hydrophilic phases, hydrophobic phases and surfactants, their structure is not the same. As outlined previously, emulsions are typically oil droplets suspended in an aqueous medium. The droplet may be surrounded by a single layer of surfactant molecules to prevent coalescence with neighbouring droplets. The emulsions described in Fukuda are "complex emulsions," i.e., in the form of water phase/oil phase/water phase. Each phase is stabilized relative to each other phase by a single layer of surfactant molecules. If the emulsions of Fukuda are diluted, the different phases will no longer be stable, and will coalesce into two separate phases, a water and an oil phase. In contrast to this, a polyaphron dispersion may be diluted by the addition of more external phase, or continuous phase without the addition

summary, an emulsion and a polyaphron dispersion are simply not the same. Thus, a complex emulsion (i.e., an emulsion having more than two phases) and a complex polyaphron dispersion are not the same.

The examiner has stated that the features, i.e., the double layers of surfactants and the properties of polyaphrons are not recited in the claims and cannot therefore be relied upon to distinguish the present invention from that of Fukuda. It is submitted that the examiner is mistaken in this regard. A person of ordinary skill in the art knows that polyaphrons have the properties described, and that these properties distinguish polyaphron dispersions from emulsions. Just because this differences are not specifically recited in the claims does not mean that they are not inherent in the properties of polyaphron dispersions.

The examiner is requested to review U.S. Patent No. 4,486,333 to Sebba, which is referenced on page 1 of the present application. Oil-in-water emulsions are distinguished from biliquid foams (polyaphron dispersions) in this patent. In particular, the examiner is referred to column 1, lines 31 to 46:

"The water-lamella biliquid foams with which the present invention is concerned are to be distinguished from oil-in-water emulsions in which the discontinuous oil phase is separated from the continuous aqueous phase by a single interface. In the composition under consideration, the globules of non-polar liquid are encapsulated in a double

surfaced film of hydrogen bonded liquid which is immiscible with the non-polar liquid and contains a soluble surfactant."

In column 5, lines 61 to 65, Sebba states that:

"The polyaphrons are characterized by extremely small non-coalescing globules of non-polar liquid. This is because of the encapsulating surfactant film which surrounds each globule and acts as a barrier to coalescence, thus clearly distinguishing the system from an emulsion" (emphasis added).

It is asserted that although polyaphron dispersions containing a single liquid external phase and a single liquid internal phase were known prior to the present application, it was not known that compositions such as those claimed in the present application could exist as stable compositions.

With respect to new claim 12, Fukuda is silent on polyaphron dispersions. Fukuda only discloses emulsions. Thus, for the reasons outlined above claim 12 is novel over this patent. Moreover, there is no disclosure in Fukuda of a polyaphron dispersion which comprises an internal phase comprising at least two liquid phases, where the components of the internal phase are liquid at room temperature and said polyaphron dispersion comprises from 70% to 95% by weight of the

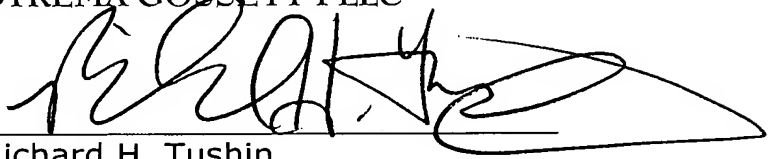
internal phase, from 5 to 30% by weight of external phase based on the total weight of the composition.

Favorable evaluation is requested.

Respectfully submitted,

DYKEMA GOSSETT PLLC

By:

A handwritten signature in black ink, appearing to read 'R. H. Tushin', is written over a horizontal line.

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